Chapter 7: Implementation

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7.1 SWAP Guides Conservation Implementation

Washington's State Wildlife Action Plan (SWAP) includes a variety of tools to guide the design, planning, and implementation of conservation projects. An important feature of the SWAP, and one that distinguishes it from many other plans, is that it is based on a comprehensive assessment of ecological systems and species in Washington. By first evaluating the full breadth of the state's species and ecological systems for conservation need, the SWAP could then assess the relative conservation priority of each, identify key stressors and threats, and outline actions to conserve species and habitats over the long term. This means that tools from the SWAP can inform, to varying degrees, projects dealing with any ecosystem or species throughout the state.

Ultimately, this comprehensive approach provides resource planners and managers information to help apply limited conservation dollars in the most efficient way possible. Specifically, the SWAP includes a set of tools to help users prioritize, design, and implement their conservation projects and activities. Although the primary intent of the SWAP is to guide the work of WDFW over the next decade, these tools are also applicable to other agencies or organizations engaged in conserving, protecting, or managing our state's fish and wildlife resources. Examples are described below.

Species and Habitat Data

The species and habitats data included in the SWAP identifies important traits such as rarity, trends, threats, and current status for both species and habitats. We used these data to systematically prioritize species into a subset of those that warrant greater conservation attention (SGCN), and those habitats (ecological systems) considered imperiled and/or of high value to SGCN into a subset of higher priority ecological systems (habitats of greatest conservation need).

Spatial Data

The mapped information produced as part of Washington's State Wildlife Action Plan is of particular value for prioritizing proposed activities and for guiding limited resources and investments to specific locations, ecosystems, or landscapes. Examples of specific opportunities include:

1. Range maps developed for a number of SGCN identify areas of known occurrence as well as those likely to provide habitat if suitable habitat conditions are present. These maps will help to prioritize species survey efforts, restoration activities, and the creation of policy and funding opportunities to direct conservation actions to these places.
2. Ecological systems maps, used in conjunction with SGCN association data and the ecological system fact sheets, can help conservation planners measure the potential value of projects by comparing how many Ecological Systems of Concern (ESOC) are benefitted and which actions to prioritize within them.
3. The SGCN distribution data from the SWAP can demonstrate how a project or initiative might aid species of interest or determine how much of a project area may contain suitable habitat for SGCNs, which also can inform the relative priority of projects.

Stressors and Actions
The information in the SWAP on stressors and the conservation actions essential to reduce stresses for ESOC and SGCN is useful as a decision support tool for evaluating and prioritizing specific projects or actions. These data can help practitioners determine the relative value of addressing stressors and selecting appropriate actions in specific places. Such data can also aid conservation planners in identifying gaps in knowledge and unmet needs for species and their habitats.

Table 7.1 summarizes components of the SWAP designed to contribute to the prioritization of conservation or recovery actions.

Table 7.1 Description of Washington Wildlife Action Plan tools

SWAP Resource or Tool	Resource/Tool Description	Potential Application
SGCN fact sheets	Fact sheets for every SGCN in Washington describe: • Species conservation status, biology and life history, distribution and abundance and habitat requirements. • Key stressors as well as conservation actions necessary to reduce the influence of stressors. • A preliminary ranking of vulnerability to climate change.	Develop, seek funding for, and implement priority conservation actions for SGCN.
Ecological system fact sheets	Fact sheets are available for each of the 18 vegetation formations in Washington. More detailed facts sheets are provided for 29 of Washington's Ecological Systems of Concern – imperiled and/or important to SGCN. These fact sheets identify: • Distribution and conservation status and concerns. • A list of closely and generally associated SGCN. • Priority stressors to the ecological system and conservation actions needed. • Research and data needs.	Develop, seek funding for and implement priority conservation actions for ecological systems.
SGCN range and distribution maps	Maps depicting the Washington range and potential habitat distributions of selected SGCN. Range maps will be added for other SGCN as sufficient occurrence data becomes available.	Guide decisions where to conduct conservation actions across a landscape.
Species associations with ecological systems	Comprehensive list describing the associations of SGCN to each of the ecological and cultural systems of Washington.	Prioritize conservation investment in areas of greatest benefit to SGCN.
Matrix of stressors and associated conservation actions for all SGCN	This matrix identifies threats and actions needed for all SGCN using standardized category descriptions. It highlights the most common shared stressors, and when combined with other tools (for example, the species association matrix), it provides a spatial perspective to understand the conservation threats facing SGCN.	Prioritize conservation actions across SGCN and across larger landscapes.

SWAP Resource or Tool	Resource/Tool Description	Potential Application
Climate change vulnerability rankings, descriptions and references	A summary of projected climate change impacts to SGCN and their habitats. A spreadsheet includes rankings of relative vulnerability to climate change for every SGCN and includes narrative to explain and support the ranking. A climate watch list includes a list of highly vulnerable species and habitats across the state.	Prioritize conservation actions for SGCN at risk from climate change. Enhance knowledge regarding the threat of climate change.
Priority Landscapes Matrix	An analysis of existing large-landscape conservation initiatives overlaid with SGCN distribution and Habitats of Greatest Conservation Need.	Applies SWAP data to inform selection of on the ground conservation priorities (specific landscapes).
Prioritization Tool	Identifies actions that are either an Absolute Priority or Non-Priority, and uses 34 factors that contribute value to an action's ultimate priority ranking.	Uses SWAP data to prioritize species and habitats for conservation action.

7.2 Approach to Prioritizing Species and Conservation Actions

The species and habitats in the SWAP are not prioritized into ranked lists for conservation attention in this document. WDFW recognizes that different priorities may emerge depending upon the specific questions being asked or the type of resources available. For example, the results of a funding priority analysis may result in different high priority actions than prioritizing based upon partnership opportunities, strictly by conservation need, or strictly through social or political lenses. As an alternative to prioritizing the SWAP itself, WDFW developed a tool that can be used to apply the SWAP data to inform prioritization, and allow for adaptation, depending on specific considerations.

WDFW Prioritization Tool
WDFW developed and tested several approaches to evaluate conservation priorities, considering a variety of criteria such as the status of the species or habitat involved, biological need, political environment, funding availability, and legal obligations, and developed a tool that can be used for that purpose (Appendix E). However, it was recognized early in the process that the real value in such a tool comes from the identification of factors that may contribute to a priority value. Application of the tool itself to score particular actions is not as critical as using the criteria and considerations to compare and contrast actions, and to explain why a particular action has either a high or a low priority.

The following sections of this chapter provide more detail on how the agency intends to use the SWAP specifically to prioritize its work, reviews benefits and potential applications by conservation partners, and highlights a few case studies as examples.

7.3 Benefits to Department Programs and Operations

Many of the agency's existing, ongoing, or future initiatives for conserving fish and wildlife can benefit from the tools developed by the SWAP and described in Table 7.1. Below we briefly describe how these tools can support activities related to:

- Department lands;
- Technical assistance;
- Species recovery and management;
- Regional landscape initiative;
- Science, research, and data; and
- Outreach and education.

7.3.1   Department Lands

Wildlife Area Planning — The SWAP identifies where SGCN and/or Ecological Systems of Concern (ESOC) occur on Wildlife Areas. Information developed regarding key stressors and actions will be consulted by practitioners in developing appropriate objectives for wildlife area management plans.

Management and Restoration — Maps produced specifically for individual wildlife areas and wildlife area complexes using the SWAP spatial data will be useful for identifying where Ecological Systems of Concern likely occur. Information in the fact sheets for each ESOC can then provide wildlife area managers with guidance on what types of actions (e.g., fire management, invasive species control) are known to have the most benefit to the SGCN associated with those systems.

Land Acquisition — A major goal of WDFW's land acquisition strategy, Lands 20/20, is to develop a portfolio of Department lands that ensures we provide multiple use benefits, including preserving, protecting, and managing Washington's fish and wildlife. SWAP tools which can help planners meet this need include the identification of Ecological Systems of Concern, and where they may occur on proposed acquisitions. Additionally, by linking all SGCN to their associated ecological systems, we can also better grasp the potential benefit to species through land conservation activities. The stressors and actions from both the SGCN and ecological system fact sheets also help identify places where acquisition or other conservation tools may be appropriate.

7.3.2   Technical Assistance

Local Land-Use Planning — WDFW's Priority Habitats and Species program provides spatial information and management recommendations in support of land use decisions that take into account the needs of fish and wildlife. Counties and cities are called upon to protect PHS species and habitats through their land use plans and development regulations required by both the Growth Management Act (GMA) and Shoreline Management Act (SMA). WDFW Habitat Biologists provide technical assistance in the development and implementation of such plans and regulations. The Range and Potential Habitat Distribution maps in Appendix B as well as the Ecological Systems of Concern can be a valuable resource for PHS biologists as they advise on major land use decisions such as Urban Growth Area expansion boundaries or more localized actions such as site-specific mitigation.

Assessing Energy Development — Energy from reusable sources such as from wind and solar has rapidly expanded in the past decade. Using PHS data, WDFW consults and advises in the proposed siting of these types of projects to ensure the needs of wildlife and their habitat is taken into account. As with technical assistance provided to counties and cities, the spatial data generated from SWAP will help us provide better advice about these projects' likely impact to PHS and SGCN species.

Priority Habitats and Species —WDFW is continuously updating PHS spatial data, management recommendations, the list of PHS species and habitats, and vehicles to deliver PHS information to clients. The factsheets and spatial data gathered in support of SWAP will be reflected in forthcoming updates of PHS products. This crosswalk between the two programs is important for conservation in Washington State as PHS is the primary tool in local land using planning efforts. PHS is referred to in GMA, SMA, and energy siting regulations and is regularly referenced by local jurisdictions.

7.3.3   Species Recovery and Management

Species-Specific Conservation Planning and Actions —Actions that are focused on a particular species' recovery include 1) surveys, monitoring and research to better understand the status and distribution of SGCNs, 2) the protection and management of habitats for SGCNs, 3) the protection of SGCNs from hunting, trapping, incidental mortality or disturbances, and 4) the management of SGCN populations (e.g., translocations, predator control, head-starting). These actions can be achieved through on-the-ground actions of biologists (e.g., surveys, nesting habitat maintenance), species protections (e.g., closed hunting season) and agreements between agencies (e.g., Candidate Conservation Agreements with Assurances, Habitat Conservation Plans, translocation agreements). WDFW produces Recovery Plans for its state-listed species, which outline the actions needed to conserve and rebuild populations of each species individually. In addition, many species that are an agency focus have or will have a shorter term Action Plan to guide resources as they are available. While many of the SWAP tools are helpful when planning for and implementing species conservation actions, the SGCN range and potential habitat distribution maps, the SGCN fact sheets, and the matrix of stressors will be especially valuable in shaping and supporting the conservation of state listed and non-listed SGCN.

Annual Reporting and Status Updates — Among their many potential uses, each of the SWAP tools could serve as a baseline or reference point to measure the effect or success of an ongoing project, or they could simply be used to provide a relevant literature reference for a status update. For example, the SGCN range and habitat distribution maps could be used to indicate the extent that habitat protections or a translocation have aided the expansion or reestablishment of a SGCN in a portion of their historical range.

Species Listing Decisions — Decisions to list a species at the state or federal level require reliable and current information about a species' status, distribution, vulnerabilities, and management history, as well as an understanding of the threats to a species. Given these needs, the SGCN range and habitat distribution maps, the matrix of stressors, the climate change vulnerability rankings, and the SGCN fact sheets will be essential for WDFW to prepare sound recommendations for species classifications to the Fish and Wildlife Commission.

7.3.4   Regional and Landscape Initiatives

Priority Landscape Initiative — Statewide Priority Landscapes is a proactive initiative aimed at identifying and mobilizing cross-programmatic agency resources to conserve iconic landscapes whose future status depends on collaboration across multiple jurisdictions and interests. Many tools developed through the SWAP helped to identify these key landscapes. A primary example is the data describing the association of SGCN with Ecological Systems. Additionally, once Statewide Priority Landscapes are formally identified, the SWAP tools that allow spatial identification of priorities for conservation action will inform the development of place-based landscape conservation action plans in these Priority Landscapes.

Arid Lands Initiative — The Washington Arid Lands Initiative represents a diverse assemblage of public, private and tribal interests working together to conserve and restore a viable, well-connected system of eastern Washington's arid lands and related freshwater habitats, sustaining native plant and animal communities, and supporting compatible local economies and communities. Partners include WDFW, Audubon Washington, US Fish and Wildlife Service, US Bureau of Land Management, Washington Department of Natural Resources, USDA Natural Resource Conservation Service, Washington Parks and Recreation Commission, The Nature Conservancy and others. This group is focused on developing and implementing a landscape conservation action plan for Washington's shrub-steppe and has identified priority areas for conservation. WDFW is currently working to identify which elements of the ALI action plan to integrate into our conservation actions. The SWAP tools will be used to inform which actions to prioritize on WDFW wildlife areas and which to integrate into our private lands incentive work.

Landscape Conservation Cooperatives – Landscape Conservation Cooperatives (LCCs) are an initiative of the Department of Interior, designed to promote landscape and regional level strategies for understanding and responding to climate change and other natural resource threats across large geographies. Washington State is a part of two LCCs – the North Pacific and the Great Northern – and the agency is represented on the Steering Committee of both these entities. Both organizations have been interested in the development of the State SWAPs, in the interests of understanding how state priorities for species and habitat conservation relate to regional priorities and how regional efforts could be leveraged to advance state conservation priorities.

Private Lands Incentive Programs — WDFW promotes, assists in the design of, and provides technical assistance for voluntary conservation programs that benefit private landowners, wildlife and the environment. This includes incentive programs through the Farm Bill such as the Conservation Reserve Program, Regional Collaborative Conservation Program, and State Acres for Wildlife Enhancement program, as well as Endangered Species Act programs such as Candidate Conservation Agreements with Assurances and Safe Harbor Agreements. WDFW will continue to tailor the development and application of these programs in Washington State so that they align with the SWAP. Each of these programs focuses on species that are identified as SGCN in Washington's SWAP (e.g. Greater Sage-grouse, Fisher, Pygmy Rabbit, and Ferruginous Hawk). Consequently, most of the SWAP tools will serve as sources of technical information to help guide the work of private lands biologists and managers that are initiating and implementing these important programs. The tools will also be used by the Wildlife Program's Lands Conservation and Restoration Section and the Habitat Program to develop and spatially direct existing and new private

land incentive tools and easements. The ecological systems stressors and actions indicate which systems need these types of programs, and the spatial data allows us to identify where in the state to direct these needs through our work with Natural Resource Conservation Service (NRCS) and the State Technical Advisory Committee.

7.3.5   Science, Research, and Data Needs

Identifying Research Needs — Each of our Department's resource programs have science divisions that are in charge of identifying and carrying out important fish and wildlife research. Much of this research is done to answer questions that will end up guiding many of the agency's decisions. The science divisions can use the SGCN and ecological systems fact sheets as a concrete tool to since each identifies research gaps for ESOC and SGCN that can be addressed through future agency research projects.

Citizen Science Program — Spatial data produced in the SWAP along with fact sheet information will help the citizen science program identify the ecosystems and species in need of monitoring in Washington. Some of the data gaps outlined in the SWAP can be filled by our agency's network of citizen scientists. The SWAP tools can help to target their work to where multiple needs could be fulfilled efficiently and where those needs are most critical to the conservation of SGCN, and to biodiversity as a whole.

Prioritizing Species Survey Needs — Each SGCN fact sheet in the SWAP, highlights actions needed to conserve the species or ecosystem. One such action is the need for surveys to better identify the range or distribution for SGCN that are lacking sufficient data. Consequently species fact sheets will provide additional guidance to the Department when deciding on which species require future surveys, and will help to prioritize among these species with similar needs.

7.4 Benefits to our Conservation Partners

Though Washington's Wildlife Action Plan will guide many of the Department's conservation activities over the next decade, it is by no means intended to be used solely by WDFW. In fact, early in the development of the SWAP, the agency sent out a survey to a broad range of current and potential conservation partners asking how the SWAP might help them to achieve their own related conservation objectives (see Chapter 8 – Outreach and Stakeholder Engagement)

This survey as well as the results from other briefings held during the development of the SWAP highlighted several activities that the SWAP could help inform, including:
- Updates to National Forest Planning;
- Identification of surrogate species through USFWS;
- GMA comprehensive planning;
- Biological assessments for National Forest Planning (e.g., with SWAP's mapping tools);
- Guiding the growth of cities to areas of most disturbance (e.g., SWAP cultural ecosystems);
- Identifying ALI private land demonstrate sites through use of stressors and actions in fact sheets along with mapped SWAP data;

- Prioritization of proposed Recreation and Conservation Office (RCO) grant recipients (e.g., SGCN and ESOC fact sheets and maps to guide ranking criteria); and,
- Prioritization of species and landscape conservation actions for tribal natural resource programs.

These are a few of the opportunities for leveraging the information in the SWAP to advance the goals of our conservation partners. The Department envisions working with partners to facilitate their orientation to and application of the SWAP tools to accomplish our shared goal to conserve, protect, and enhance fish and wildlife habitat statewide.

7.5 Future Implementation Needs

In the process of developing the SWAP, we identified a number of additional actions that would allow us to more effectively use and leverage the information and tools of the SWAP. These include the following:

Build on the work and tools of the SWAP, including:
- Developing a shared online platform to make all spatial and associated SWAP tools more easily available to department staffand conservation partners;
- Building a decision-support system to help resource and conservation planners outside of the agency more easily search out the most appropriate set of WDFW-developed tools;
- Developing a tool that allows us to spatially map key threats (using the Threats Matrix, ecological system maps and SGCN associations);
- Developing range maps for additional SGCN as new information becomes available;
- Further developing the priority landscapes initiative as a vehicle to translate the priorities for species and habitats identified through the SWAP into on the ground conservation action;
- Collaborating with Idaho Department of Fish and Game and Oregon Department of Fish and Wildlife regarding common objectives through our respective SWAP;
- Hosting workshops to thoroughly vet and build the climate vulnerability information with WDFW staff and our conservation partners;
- Increase our understanding and better account for the distribution of SGCN fishes in the ecological systems; and,
- Identify funding and partnership opportunities to address the research and data needs identified for SGCN and Ecological Systems of Concern.